

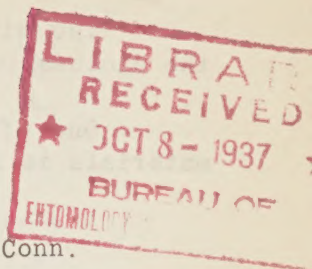
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United States Department of Agriculture
Bureau of Entomology and Plant Quarantine

A CONVENIENT FIELD CAGE FOR INDIVIDUAL INSECTS

By R. L. Beard, Department of Entomology,
Connecticut Agricultural Experiment Station, New Haven, Conn.



In the course of work on the squash bug (Anasa tristis Deg.) it was necessary to keep considerable numbers of individual bugs under observation. The task of growing a large number of potted plants requires a great deal of time, and the cost of providing suitable cages for them may be considerable. Furthermore, conditions provided by cages over potted plants may be appreciably different from those in the field. To obviate these difficulties a very simple and inexpensive cage was devised which can be used directly on plants growing in the field. A vigorous squash plant can accommodate a number of these cages with very little injury to the plant other than that caused by the insects.

The cage itself is a small box (fig. 1, B) made of hardware cloth, with a projecting lip at one end. This box, containing the insect, is placed against the under surface of a squash leaf. A rectangular piece of hardware cloth (fig. 1, A), somewhat larger than the box, is placed on the upper surface of the squash leaf, directly over the box. The projecting lip of the box is then fastened to the cover by means of a spring clothespin (fig. 1, C). A wire support (fig. 1, D) passes through the spring in the clothespin and is inserted in the ground. Such a support, although assuming much of the weight of the cage, allows considerable freedom of movement, thus permitting leaf growth and reducing the danger of the leaf being torn by the wind. The cage, in position on the leaf, is diagrammed in figure 2, and is shown in use in the field in the photograph (fig. 4).

Construction: The cage is made from a rectangular piece of 8-mesh hardware cloth, $2\frac{3}{4}$ inches wide and $3\frac{1}{2}$ inches long. Four lengthwise cuts are made, as shown in figure 3, A, each cut being $\frac{5}{8}$ of an inch long and $\frac{5}{8}$ of an inch from the margin. The ends and sides are then bent at right angles to the bottom, as shown in figure 3, B. The projecting ends of the sides are then bent at right angles to the sides, over the ends of the box. The projecting lip of the box is made from another strip of hardware cloth $\frac{3}{4}$ by $2\frac{1}{2}$ inches, bent as shown in figure 3, C. This is then slipped over one end of the box, fastened firmly with wire, and pressed flat by means of pliers. The opposite end of the box is also made secure with wire.

The cover is merely a rectangular piece of hardware cloth, 2 by 3 inches.

The wire support is of 11-gauge wire, inserted through the spring in the clothespin and bent in the shape shown in figure 1, D.

One of these cages can be made in 5 minutes or less, and the cost of materials is less than 2 cents each.

Explanation of Illustrations

Figure 1.--A, cage; B, cover; C, clothespin fastener; D, wire support.

Figure 2.--Diagram of cage in position on leaf.

Figure 3.--Steps in the construction of the cage.

Figure 4.--Photograph of cage in position on plant.

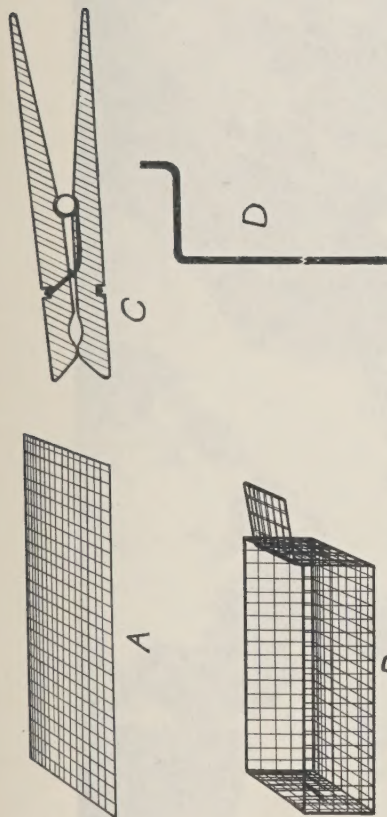


FIG. 1

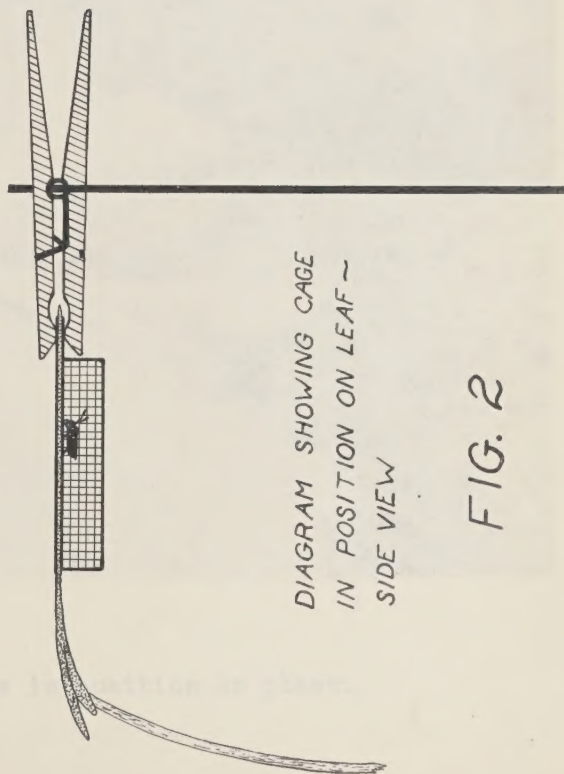


DIAGRAM SHOWING CAGE
IN POSITION ON LEAF ~
SIDE VIEW

FIG. 2

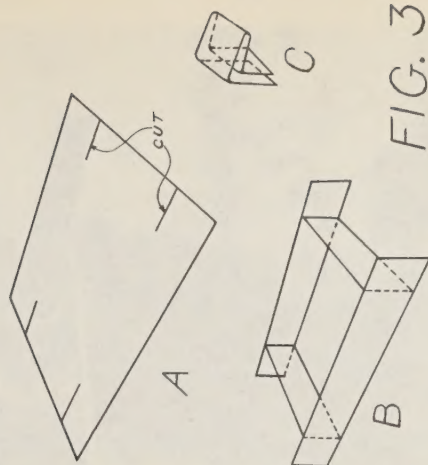


FIG. 3



Figure 4. - Cage in position on plant.

